Before the

United States of America

Federal Energy Regulatory Commission

June 16, 2005

Comments Submitted On Behalf of

Borough of Chambersburg,

Borough of Mont Alto, and

Thurmont Municipal Light Company

"PJM -- The Need for

Interstate Bulk Transmission

System Expansion"

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I. STATEMENT OF ISSUES

A. PJM has stated that we are on the verge of a Reliability Crisis.

B. PJM has stated that the cause of this crisis will be a shortage of available generation in future years.

C. PJM has stated that the proper solution to this future Reliability Crisis is a new Reliability Pricing Model (RPM).

II. OVERVIEW OF ISSUES

A. Is the PJM system on the verge of a capacity shortfall?

B. If we are facing a system-wide crisis, what is the core problem behind this crisis?

C. If a system-wide, mandatory, socialized solution is necessary, what is the appropriate socialized solution with the best benefit-to-cost ratio?

III. PJM SYSTEM FACTS

A. The PJM system is not facing a system-wide shortage of available generation.

B. The PJM system has 26% of available Installed Reserve Margin Generation throughout its network.

C. The PJM system meets its reliability criteria with an Installed Reserve Margin of 14.7% and has adopted an official Installed Reserve Margin of 15%.

D. The large majority of PJM zones have excess generation margins.

E. The development of the RPM by PJM was caused by the announced retirement of five generating units by Public Service Electric and Gas (PSE&G) in New Jersey.

F. The announced retirement by PSE&G of five generators caused a local deliverability problem but not a PJM network-wide problem.

IV. DISCUSSION OF ISSUES

A. <u>Question</u>: What type of system deficiency is demonstrated by the announced retirements by PSE&G of five generation units?

<u>Answer</u>: The retirements planned for New Jersey prove that PJM has a transmission deficiency problem in the bulk transmission network supplying power to the eastern PJM region.

B. <u>Question</u>: What is the root cause of a deficiency in the eastern PJM bulk transmission system?

<u>Answer</u>: These PSE&G units that are retiring were built as part of an integrated transmission and generation solution to meet the load in the PSE&G service territory. These units mitigated the requirement to add transmission to be able to deliver power to PSE&G's load. Now that they are retiring due to market reasons, the only solution is transmission. Presently, PJM lacks a Long-Term Bulk Transmission Expansion Planning Process to provide for adequate transport of bulk energy supplies across the entire network.

C.   <u>Question</u>: Does the PJM Regional <u>Transmission Expansion Planning Process</u> provide for the needed expansion of the bulk transmission system?

<u>Answer</u>:

1.   No, the Regional Transmission Expansion Planning Process deals with the solution of NERC criteria violations and deliverability problems.

2.   The system improvements that correct these violations and problems basically will not provide for the system-wide expansion of the bulk transmission network.

3.   The Regional Transmission Expansion Planning Process deals with a one-to-five year planning horizon for localized projects usually within one transmission zone.

4.   Adequate improvements to the PJM bulk transmission system will instead require an interstate, multi-transmission owner planning process with a seven-to-ten year planning horizon.

D.   <u>Question</u>: Does the PJM <u>Economic Expansion Planning Process</u> provide for the needed expansion of the bulk transmission system?

<u>Answer</u>:

1.   To date, the Economic Expansion Planning Process has dealt only with the solution of localized congestion relief projects,

not interstate, multi-transmission owner, bulk system improvements.

2. Table No. 1 (following) provides examples of the types of projects covered by the Regional Transmission Expansion Planning Process and the Economic Expansion Planning Process.

◆pjm Economic Planning Study Results for Keeney 500/230 kV

RTEP Changes Applied

Branch Changes (2006)

Third Jackson 230/115 kV Transformer

Rerate Jackson 4 and 5 230/115 kV Transformers

Rerate Yorkana 1, 2, 3 230 kV Transformers

Upgrade Midd Jct – Yorkhaven 115 kV (38% increase)

Add SPS at Wylie Ridge

Add SPS a Bridgewater

Replace wavetrap on Branchburg – Flagtown 230 kV (16% Increase)

Replace terminal equipment for Brunswick – Adams – Bennetts Lane 230 kV (29 % Increase)

Install third Branchburg 500/230 kV transformer

Place Sickler 230/69 kV spare transformer in-service

Replace wavetrap on Flagtown – Somerville 230 kV (18% Increase)

Build new Red Lion – Milford – Indian River 230 kV

Replace Wye Mills AT1 and AT2 138/69 kV transformers (65% Increase)

Replace Indian River AT-20 (33% Increase)

Replace Keeney 230/138 kV transformer (33% Increase)

Upgrade Dupont Seaford – Laurel 69 kV (38% Increase)

E.   Question: Is PJM aware of the need for expansion of the bulk transmission system?

Answer: Yes, PJM based its original multi-year plan for integration of new transmission companies and expansion of the market region on the following principles:

1.   Large resources of base load generation in the Mid-West would be made available to loads in the East.

2.   Network-wide deliverability of all generation to load would be maintained.

3.   The resultant reduction in required Installed Reserve Margin and subsequent lower energy cost to load would be available throughout the system.

F.   Question: Why has PJM not pursued the system-wide expansion of the bulk transmission network in the face of reliability and national security needs?

Answer: PJM believes that it does not have a clear federal mandate and necessary state cooperation to enable it to do so.

G.   Question: Why have individual transmission owners not pursued the system-wide expansion of the bulk transmission network?

Answer:

1. The economic goals and planning horizons of individual transmission owners differ from company to company and at times cause planning conflicts between these companies.

2. Transmission owners fear that the cost of network-wide bulk transmission expansion could be unequally borne by their companies with more benefit going to competing companies and more cost coming to their customers.

3. Transmission owners fear difficult battles with State Public Service Commissions and with environmental groups if large scale transmission projects are undertaken.

4. Most of the transmission owners impacted by the construction of new interstate bulk transmission lines fear that they would not see any benefit themselves because of the belief that most of the power would be moved across their systems to other transmission zones. They, therefore, fear that their individual State Public Power Commissions would not approve the additional construction costs in rate base, and stockholders would have to bear the expense.
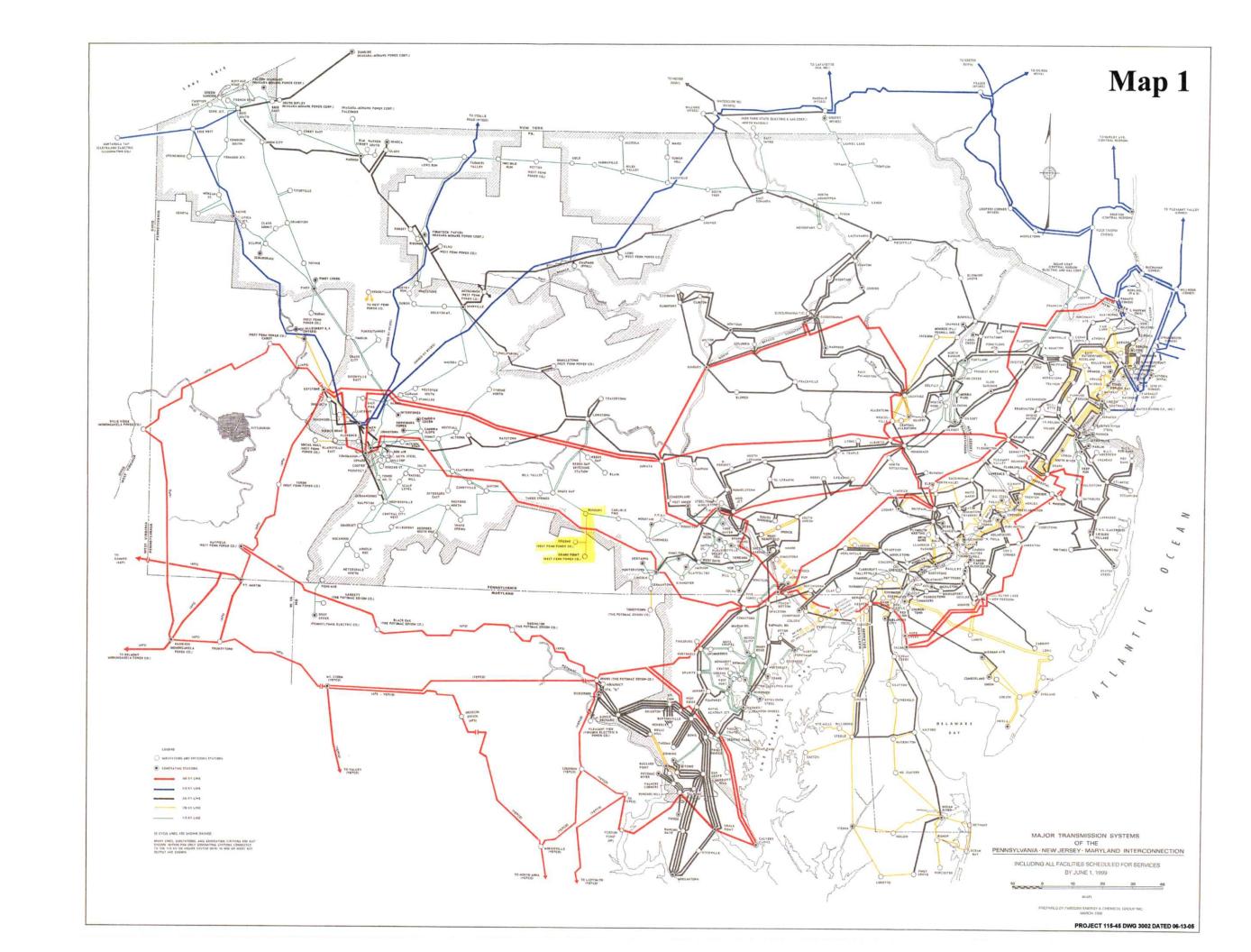
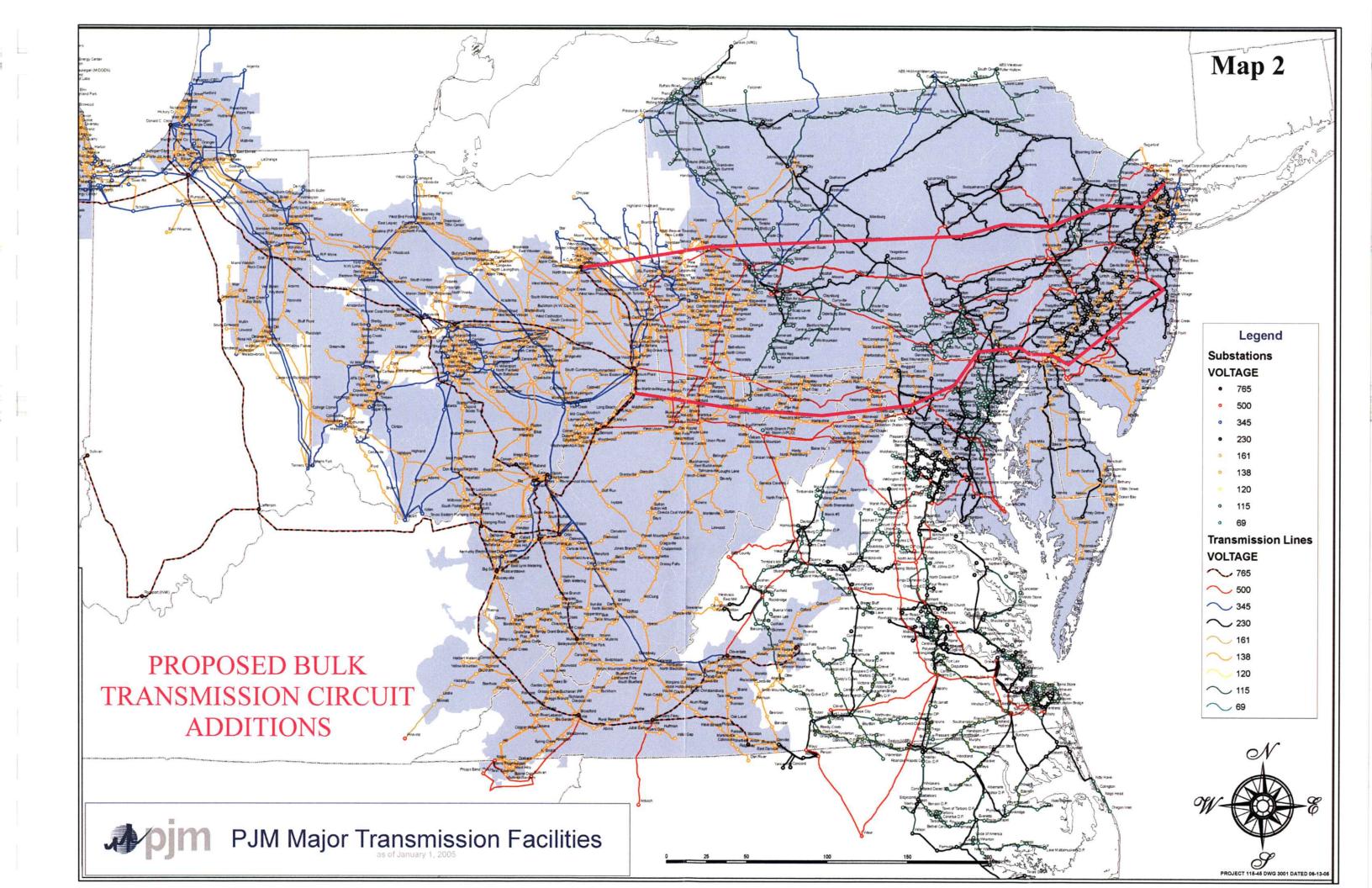H.   <u>Question</u>: Why have individual states not pursued the expansion of the bulk transmission network?

<u>Answer</u>: Individual states have not been provided a system-wide perspective of the issues by PJM and the transmission owners.

I.   <u>Question</u>: Are there effective solutions to the expansion of the PJM bulk transmission system network that will allow the large base load generation resources of the Mid-West to serve the load centers within the eastern states?

<u>Answer</u>:

1.   At present, only four major bulk transmission routes exist through PJM which connect the Mid-West to the east coast load centers (see the following Map No. 1).

2.   The construction of an additional 500 KV transmission circuit through the northern half of Pennsylvania and an additional 500 KV transmission circuit through West Virginia and western Maryland would greatly enhance the operation of the bulk transmission network (see the following Map No. 2).

Map 1

MAJOR TRANSMISSION SYSTEMS
OF THE
PENNSYLVANIA - NEW JERSEY - MARYLAND INTERCONNECTION

INCLUDING ALL FACILITIES SCHEDULED FOR SERVICES
BY JUNE 1, 1999

PREPARED BY FAIRBORN ENERGY & CHEMICAL GROUP INC.
MARCH 1998

PROJECT 115-45 DWG 3002 DATED 06-13-05

Map 2

PROPOSED BULK
TRANSMISSION CIRCUIT
ADDITIONS

Legend

Substations
VOLTAGE
- 765
- 500
- 345
- 230
- 161
- 138
- 120
- 115
- 69

Transmission Lines
VOLTAGE
- 765
- 500
- 345
- 230
- 161
- 138
- 120
- 115
- 69

pjm PJM Major Transmission Facilities
as of January 1, 2005

0   25   50   100   150

PROJECT 116-45 DWG 3001 DATED 08-13-05

J.   Question: Would the suggested expansion of the bulk transmission network be a more cost-effective solution than the RPM method?

Answers:

1.   Yes, PJM suggests that if optimized, RPM would add approximately $2.6 billion in capacity cost annually.

2.   If the PJM RPM process is not optimized and generation costs rise across the network to the CONE level, the cost of generation capacity could reach $6.4 billion annually (see Tables No. 2, 3, and 4).

3.   A one-time investment of capital in bulk transmission system expansion equal to the projected annual cost of RPM would yield far greater benefits to system reliability and deliverability.
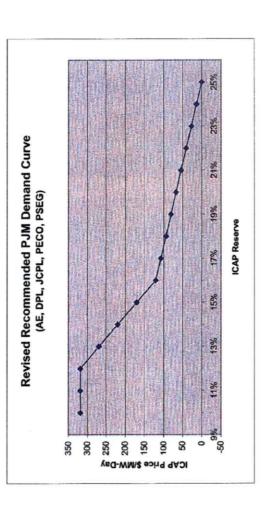
pjm

CONE CT REVENUE REQUIREMENTS	New Jersey	Maryland	Chicago Suburbs
Total Levelized Revenue Requirements ($/MW-Year)	$72,207	$74,117	$73,866
Difference ($/MW-Year)	$0	$1,910	$1,659
Total Levelized Revenue Requirements ($/MW-Day)	$198	$203	$202
Difference ($/MW-Day)	$0	$5	$5
Net Revenue Offset ($/MW-Year)	$28,251	$28,251	$28,251
Difference ($/MW-Year)	$0	$0	$0
Net Revenue Offset ($/MW-Day)	$77	$77	$77
Difference ($/MW-Day)	$0	$0	$0
Net CONE ($/MW-Year)	$43,956	$45,866	$45,615
Difference ($/MW-Year)	$0	$1,910	$1,659
Net CONE ($/MW-Day)	$120	$126	$125
Difference ($/MW-Day)	$0	$5	$5

3

REVISED RECOMMENDED PJM DEMAND CURVE FOR RPM
Transition Zone A Applies to the AE, DPL, JCPL, PECO and PSEG Zones
Updated January 12, 2005

Cost of New Entry = 72.207 $/kW-year
E&AS Revenues = 28.251 $/kW-year
IRM = 15%

Revised Recommended PJM Demand Curve
(AE, DPL, JCPL, PECO, PSEG)

Reserve	Fixed Cost $/kW-yr	E&AS Rev $/kW-yr	Net Cost $/kW-yr	ICAP Price $/MW-Day	
10%	144	28	116	318	
11%	144	28	116	318	
12%	144	28	116	318	IRM - 3%
13%	126	28	98	269	
14%	108	28	80	219	
15%	90	28	62	170	IRM
16%	72	28	44	120	IRM + 1%
17%				107	
18%				94	
19%				80	
20%				67	
21%				54	
22%				40	
23%				27	
24%				13	
25%				0	IRM + 10%

Notes:

1. At 3% below IRM, the price is based on TWO times Cost of New Entry less E&AS Revenues.
2. At 1% above IRM, the price is based on ONE time Cost of New Entry less E&AS Revenues.
3. At 10% above IRM, the price is zero.

TABLE NO. 4

RPM EXAMPLE: BASE RESIDUAL AUCTION RESULTS (Phase II)

	B	C	D	E	F	G	H	I	J	K = F+G+J
LOCATIONAL DELIVERABILITY AREA (LDA)	Total Offers Cleared (MW)	Capacity Cleared Without Operating Attributes (MW)	Load Following Capacity Cleared (MW)	Thirty Minute Start Capacity Cleared (MW)	Marginal Value of System Capacity ($/MW-day)	Locational Price Adder ($/MW-day)	Load Following Price Adder ($/MW-day)	Thirty Minute Start Price Adder ($/MW-day)	Operational Reliability Load Price Adder from BR Auction ($/MW-day)	Preliminary Zonal Capacity Price ($/MW-day)
Eastern MAAC	31860	31860	0	0	$ 25.00	$ 89.43	$ -	$ -	$ -	$ 114.43
Southwest MAAC	10856	10856	0	0	$ 25.00	$ 47.67	$ -	$ -	$ -	$ 72.67
REST OF RTO	111205	111205	0	0	$ 25.00	$ -	$ -	$ -	$ -	$ 25.00
Total RTO	153921	153921	0	0						

Resource Clearing Price ($/MW-day)

LDA	F+G Capacity Without Op Attributes	F+G+H Load Following Capacity	F+G+I Thirty Minute Start Capacity	Base Residual Auction Credits ($/day)
Eastern MAAC	$ 114.43	$ 114.43	$ 114.43	$ 3,645,739.80
Southwest MAAC	$ 72.67	$ 72.67	$ 72.67	$ 788,905.52
REST OF RTO	$ 25.00	$ 25.00	$ 25.00	$ 2,780,125.00
Total RTO				$ 7,214,770.32

Base Residual Auction Parameters

Preliminary RTO Peak Load Forecast (MW)	137672
RTO ILR Forecast (MW)	1638
DR Factor	0.946
Poolwide Average EFORd	0.0653
Forecast Pool Requirement	1.0749
Forecast ILR Obligation (MW)	1666
RTO Reliability Requirement Less Forecast RTO ILR Obligation (MW)	146318
Load Following Requirement (MW)	0
Thirty Minute Start Requirement (MW)	0

CALCULATIONS

Preliminary Zonal Capacity Price = Marginal Value of System Capacity + Locational Price Adder + Operational Reliability Load Price Adder

Operational Reliability Load Price Adder from Base Residual Auction= ((Total Load Following Capacity Cleared for RTO * Load Following Price Adder) + (Total Thirty Minute Start Capacity Cleared for RTO * Thirty Minute Start Price Adder)) / (Total Offers Cleared for RTO + Forecast ILR Obligation)

Resource Clearing Price for Capacity Without Operating Attributes = Marginal Value of System Capacity + Locational Price Adder

Resource Clearing Price for Load Following Capacity = Marginal Value of System Capacity + Locational Price Adder + Load Following Price Adder

Resource Clearing Price for Thirty Minute Start Capacity = Marginal Value of System Capacity + Locational Price Adder + Thirty Minute Start Price Adder

Base Residual Auction Resource Credits = (Capacity Cleared Without Operating Attributes* Resource Clearing Price for Capacity Without Operating Attributes) + (Load Following Capacity Cleared * Resource Clearing Price for Load Following Capacity) + (Thirty Minute Start Capacity Cleared* Resource Clearing Price for Thirty Minute Start Capacity)

Forecast RTO ILR Obligation = RTO ILR Forecast * DR Factor * Forecast Pool Requirement

RTO Reliability Requirement Less Forecast RTO ILR Obligation = (Preliminary RTO Peak Load Forecast * Forecast Pool Requirement) - Forecast RTO ILR Obligation

Load Following Requirement = Preliminary RTO Peak Load Forecast * 0.3140 * Forecast Pool Requirement

Thirty Minute Start Requirement = Preliminary RTO Peak Load Forecast * 0.08 * (1 - Poolwide Average EFORd)

INPUTS

Total Offers Cleared*
Capacity Cleared Without Op Attributes
Load Following Capacity Cleared
Thirty Minute Start Capacity Cleared
Marginal Value of System Capacity*
Locational Price Adder*
Load Following Price Adder
Thirty Minute Start Price Adder
Preliminary RTO Peak Load Forecast*
RTO ILR Forecast*
DR Factor*
Poolwide Average EFORd*
Forecast Pool Requirement*

*Inputs from Phase II Simulation Results presented on January 26, 2004. All other inputs assumed for illustration purposes.

Note: Dispatchable Ratio Factor of 0.3140 and Reserve Objective Factor of 0.08 are taken from the Whitepaper on Operational Reliability Metrics Version 1.4. These results are preliminary and are for illustration purposes only and do not represent past, current, or future actual market data results or conditions.

The data reflected herein is provided by PJM solely as a sample of the operation of the Reliability Pricing Model. These results are preliminary and are for illustration purposes only and do not represent past, current, or future actual market data results or conditions.

K. Question: What would be the projected cost of the proposed bulk transmission circuit additions as depicted on Map No. 2?

Answer:

1. Each of the proposed 500 KV bulk transmission circuits would require approximately 400 miles of construction.

2. Each of the transmission circuits could require up to 10 transmission substations.

3. Each of the transmission circuits would require the purchase of extensive right-of-way paths.

4. Assume the following:

    a. Transmission Circuit Construction @ $2.5 million/mile

    b. Transmission Substation Construction @ $80 million each

    c. Total right-of-way acquisition cost = $400 million

        Total Projected Project Costs:

        (1) 800 miles of 500 KV Transmission@ $2.0 billion
        (2) 20 transmission substations @ $1.6 billion
        (3) Right-of-way cost @   .4 billion

                            Estimated Total Cost = $4.0 billion

L. Question: The proposed bulk transmission construction would be a one-time investment instead of the <u>annual</u> capacity uplift charge for the RPM of $2.6 billion to $6.4 billion. What would be the annual cost to ratepayers of the transmission construction if socialized across the PJM system?

Answer:

1. Assuming a 20% annual carrying charge for a transmission investment of $4 billion and a 10-year payback of the initial capital investment would yield an annual cost to ratepayers of $954 million.

2. According to PJM data, the annual energy delivery of the PJM system is forecasted to grow from 698,286 GWh in 2006 to 805,540 GWh by 2015.

3. Assuming PJM's cumulative projected energy usage for the decade of 2006 through 2015 of 7.53 million GWh, the annual cost of the transmission expansion would average $0.00127/KWh over the ten-year time period (see Table No. 5).

M. Question: Is it appropriate to socialize the cost of bulk transmission construction across the entire PJM network?

Answer:

1. Yes, the resultant benefits of enhanced system reliability and vastly improved access to energy markets would bring value to

customers throughout the PJM network in addition to achieving PJM's stated goals of system integration with the Mid-West and the ultimate development of a Joint and Common Market with MISO.

2. Transmission constraints such as the chronically over-burdened Beddington to Black Oak 500 KV line and the transformer at Doubs increase ratepayer costs on a multi-zonal, multi-state scale. See the attached PJM LMP Graphs (1 through 4) for graphic representations of how these transmission constraints added costs on June 6, 2005 (Graphs 1 and 2) and again on June 8, 2005 (Graphs 3 and 4). As examples, the constraint on Graphs 1 and 2 caused the BG&E zonal real-time LMP to hit $234.15/MWH, while the constraint on Graphs 3 and 4 caused real-time LMPs from central Pennsylvania to northern Virginia to the New Jersey shore to eclipse $200.00/MWH.

3. Actually as proposed, the PJM RPM is itself, a mandatory program with socialized cost borne by ratepayers.

TABLE NO. 5

Transmission Buildout Cost Analysis
$4 Billion Estimated Project Cost

Year	PJM Forecasted Energy, GWh [1]	Initial Cost	Annual Carrying Charge	Term (yrs)	Annual Debt Service Cost	Cost / Forecasted kWh
2006	698,286	$4,000,000,000	20%	10	$954,091,028	$0.00137
2007	712,128	$4,000,000,000	20%	10	$954,091,028	$0.00134
2008	724,983	$4,000,000,000	20%	10	$954,091,028	$0.00132
2009	735,842	$4,000,000,000	20%	10	$954,091,028	$0.00130
2010	747,466	$4,000,000,000	20%	10	$954,091,028	$0.00128
2011	759,214	$4,000,000,000	20%	10	$954,091,028	$0.00126
2012	771,117	$4,000,000,000	20%	10	$954,091,028	$0.00124
2013	782,095	$4,000,000,000	20%	10	$954,091,028	$0.00122
2014	793,934	$4,000,000,000	20%	10	$954,091,028	$0.00120
2015	805,540	$4,000,000,000	20%	10	$954,091,028	$0.00118
Ten Year Total	7,530,606				$9,540,910,275	$0.00127

Notes:

1. Based on PJM Forecasted Energy Usage and includes Dominion.
   http://www.pjm.com/documents/downloads/reports/monthly-peak-energy.xls

WPR HamsherR PJM 10 Year Projected Energy Sales AVD 1152634.xls
6/20/2005
/sle:115.45

Downes Associates, Inc.

RT DA BOTH
Scale 12 hr
LMPs
Time
06/06/2005

Price in US$

400
300
200
100
0
-100
-200

03 04 05 06 07 08 09 10 11 12 13 14 15

LMP	Cur	Avg	Min	Max
GRANDPT--138 KV--T62	259.8	80.38	22.07	266.1
BLACKOAK (500/765KV Agg)	-39.0	26.48	-101	100.4
PRUNTYTOWN (500/765KV Agg)	77.70	39.82	-9.42	115.2

LMP	Cur	Avg	Min	Max
APS (Zone)	143.2	55.06	13.85	143.2
BEDINGTON (500/765KV Agg)	294.0	83.00	22.18	300.8
DOUBS (500/765KV Agg)	242.7	75.88	23.70	249.8

Select: LMP Chart

NY NJ DE PA VA NC WV OH KY MI IN TN IL IA
08/06/2005 14:05

Legend PJM RTO
Select: PJM LMP Contour Map

Forecast Last Updated - Monday June 06, 2005 - 14:15 EDT

MegaWatts

120000
110000
100000
90000
80000
70000
60000
50000

00 02 04 06 08 10 12 14 16 18 20 22 00

— Forecasted — Instantaneous — Day Ahead Demand

PJM RTO Tota

06/05/2005 06/06/2005 06/07/2005
Select: PJM Loads

eDATA
Provided by pjm

Elevated Significant Risk
Monday June 06, 2005 - 14:10 EDT
Current PJM RTO Load: 114,258Mw

Information Is Power

My eData Preferences

Chambersburg CburgFTR
Berlin St Michaels
ECI All
New Jersey Seaford

My eData Constraints
Energy Contracts Activity Log
eSuite Announcements
IRC Report Emergency Msgs

08/06/2005 11:05

PJM eData Services - Microsoft Internet Explorer

RT
DA
BOTH
Scale
12 hr
LMPs
Time
06/08/2005

Price in US$
250
200
150
100
50

04 05 06 07 08 09 10 11 12 13 14 15 16

LMP	Cur	Avg	Min	Max
PJM (Zone)	164.9	74.56	25.93	164.9
AE (Zone)	229.7	103.5	26.80	229.7
SHERMAN--138 KV--CT 1	228.4	100.6	26.83	228.4

LMP	Cur	Avg	Min	Max
VINELAND--69 KV--BUS1	228.0	100.4	26.83	228.0
LANDIS--138 KV--FBUS	227.6	100.2	26.83	227.6

Select: LMP Chart

Provided by
pjm

Elevated   Significant Risk

Wednesday June 08, 2005 - 15:05 EDT
Current PJM RTO Load: 122.689MW

GENSCAPE

My eData Preferences

Chambersburg   CburgFTR
Berlin   St Michaels
ECI   All
New Jersey   Seaford

Constraints
My eData   Activity Log
Energy Contracts   Announcements
eSuite

Forecast Last Updated - Wednesday June 08, 2005 - 14:45 EDT

Megawatts
130000
120000
110000
100000
90000
80000
70000
60000

00 02 04 06 08 10 12 14 16 18 20 22 00

Forecasted — Instantaneous — Day Ahead Demand

06/07/2005   06/08/2005   06/09/2005

PJM RTO Tota

Legend   PJM RTO

06/08/2005 15:05

KY MI PA DE VA NC WV OH KY IN TN IL IA

Internet

Applet started

Ohio 8/2005 15:05

N.   Question: Will the type of construction proposed for new interstate bulk transmission circuits provide for greater system reliability and national security for the nation's electrical network than what would be provided by the RPM system?

Answer:

1.   Yes, the construction of new interstate bulk transmission circuits would provide permanent system improvements with 50 to 60-year life spans.

2.   The bulk transmission network would be re-enforced beyond the threshold of NERC criteria violation avoidance to a level of redundancy truly needed for national security. The weakest part of our national electrical system today is the high voltage transmission network. This was clearly demonstrated by the costly outage of August 2003. Redundancy on the system is needed

3.   New bulk transmission circuit and substation construction would spur the construction of new base load generating plants by investment groups who would seek to capitalize on new low-cost access to markets throughout PJM. These plants would have 50 to 60-year life spans, as well, yielding a better long-term return to ratepayers.

4.   The RPM system as proposed by PJM is based upon the stimulation of investment in combined-cycle combustion

turbine, natural gas-fired generators. With the nation's gas pipeline capacity in the Mid-Atlantic in serious question and the typical life span of most combustion turbine investments, PJM is essentially proposing a short-term solution to a long-term reliability and national security problem.

V. CONCLUSION

A.   Question   What must be done to spur critically needed investment in new interstate bulk transmission system construction.

Answer:

1.   The Federal Energy Regulatory Commission should lead an investigation into all of the factors preventing the construction of new bulk interstate transmission facilities.

2.   The Federal Energy Regulatory Commission should convene a convocation of the State Public Service Commissions within the PJM network, PJM Transmission Owners, and PJM Planners to develop a long-term strategy to address this critical need.

5.   The Federal Energy Regulatory Commission should direct the PJM to develop a formal Long-Term Bulk Transmission System Expansion Planning Process with at least a seven to ten-year planning horizon.

6.   The Federal Energy Regulatory Commission and PJM States should jointly develop a long-term plan for the expansion of the interstate bulk transmission network which could more effectively supply vital energy resources to the Mid-Atlantic and Mid-Western sections of the United States.

7.   The Federal Energy Regulatory Commission and the PJM States must ensure that enhanced electrical system reliability is obtained through the <u>lowest</u> <u>cost</u> <u>solution</u> that yields the greatest <u>long-term</u> <u>cost</u> <u>benefit</u> to all ratepayers within PJM.

8.   The expansion of the interstate bulk transmission systems is the best and most cost effective solution to the reliability and national security needs of the PJM network.